4PB00104C

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OhioEPA

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May 6, 2009

The Honorable Terry Ashcraft
Mayor
Village of Kirkersville
P.O. Box 211
135 North 4th Street
Kirkersville, OH 43033

Dear Mayor Ashcraft:

Attached is a report for a Reconnaissance Inspection that Suzanne Matz and I performed April 6, 2009 at the wastewater treatment plant (WWTP) serving the Village of Kirkersville. We met with Eric Britenstine who was recently hired by the village as the Operator in Responsible Charge of this WWTP.

As the inspection progressed we agreed with Mr. Britenstine that work was necessary in the WWTP to prevent possible wastewater discharge permit violations from occurring. Several pumps needed repair and sludge needed to be removed from several plant components. Mr. Britenstine was interacting with a private contractor for sludge removal and disposal in an approved manner.

Even though the WWTP is in need of attention the village is fortunate in that it has a plant that generally remains in fairly good condition. The village should continue setting aside monies necessary for maintenance and proper operation of its plant and sanitary sewer collection system.

During this inspection a question arose regarding who has responsibility for the Kellers Road wastewater pump station serving the Flying J Travel Center and Phantom Fireworks located south of Kirkersville. Please advise me in writing regarding a contact person responsible for oversight of this pump station.

If you have questions regarding this report I can be reached by telephone at 614-728-3850 or by e-mail at jan.rice@epa.state.oh.us .

Sincerely,

Jan A. Rice
Environmental Specialist
Field Operations Unit
Division of Surface Water
Ohio EPA/Central District Office

c: Eric Britenstine

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

JAR/nsm Kirkersville 4-6-09RIClr

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NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
4PB00104*CD	OH0114049	4/6/09	R	S	1

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Village of Kirkersville Wastewater Treatment Plant (WWTP) North side of US Rt. 40 approx. one half mile east of Outville Road	9:30 A.M.	7/1/07
	Exit Time	**Permit Expiration Date**
	10:20 A.M.	6/30/12

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Eric Britenstine, Operator in Responsible Charge	(c) 614-207-9030
Name, Address and Title of Responsible Official	**Phone Number**
Terry Ashcraft, Mayor, P.O. Box 211, 135 North 4th Street, Kirkersville, Ohio 43033	740-927-9052

C. AREAS EVALUATED DURING INSPECTION (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S Permit
N/S Records/Reports
N/U Operations & Maintenance – flow equalization tank and fixed media clarifier mud well pumps need repair.
M Facility Site Review – repair of several pumps is necessary along with solids removal from slow sand filters.
N Collection System
N Flow Measurement
N Laboratory
S/N Effluent/Receiving Waters
S/M Sludge Storage/Disposal – sand/solids removed from the effluent sand filter needs proper disposal.
N Pretreatment
N Compliance Schedules
S Self-Monitoring Program

D. SUMMARY OF FINDINGS/COMMENTS: Design flow for this plant is 0.100 million gallons per day (MGD). Discharge monitoring report data indicates flows for 2008 averaged 0.06 MGD. The 2008 annual sludge report indicates that 4.75 dry tons of sludge was removed from the WWTP. Inspection of the flow equalization tank showed that the tank was operating in a flow-through rather flow-equalization mode since pumps in the tank were out of service. The flow equalization tank needs to be returned to service as soon as possible to limit the detrimental impact that hydraulic surges may have on effluent quality. Inspection of the effluent sand filter showed ponded wastewater in a filter cell. That filter, and others, needs cleaning to prevent wastewater ponding. Sand/sludge removed during effluent sand filter cleaning must be properly disposed of, not spread alongside the filter. The sludge drying beds were not in use at the time of this inspection. At the time of this inspection Mr. Britenstine indicated that he was working with Carl Wheeler for removal of liquid sludge from this plant.

Jan Rice — 5/6/09
Jan Rice, Inspector, Ohio EPA, Central District Office — Date

Erin Sherer — 5/6/09
Erin Sherer, Reviewer, Ohio EPA, Central District Office — Date

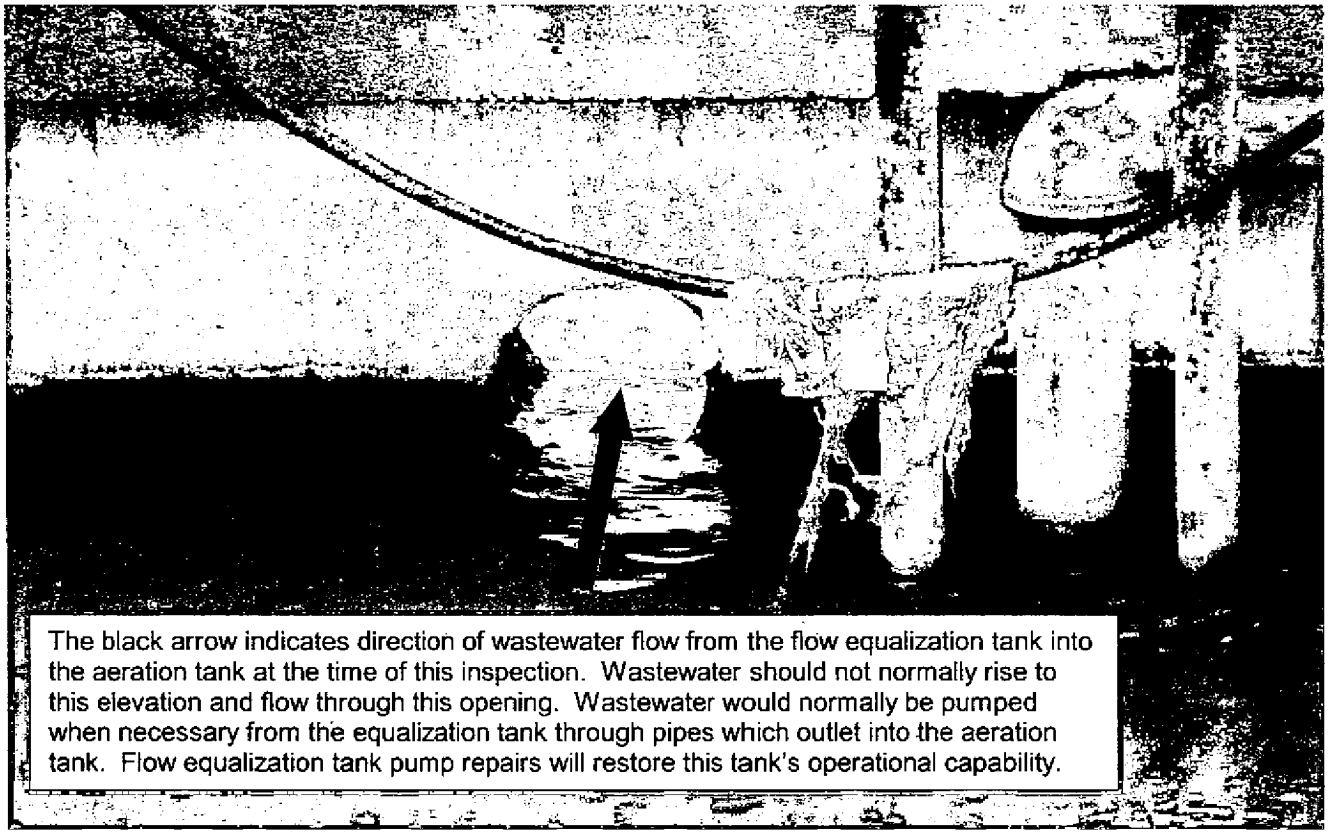

Figure 1.

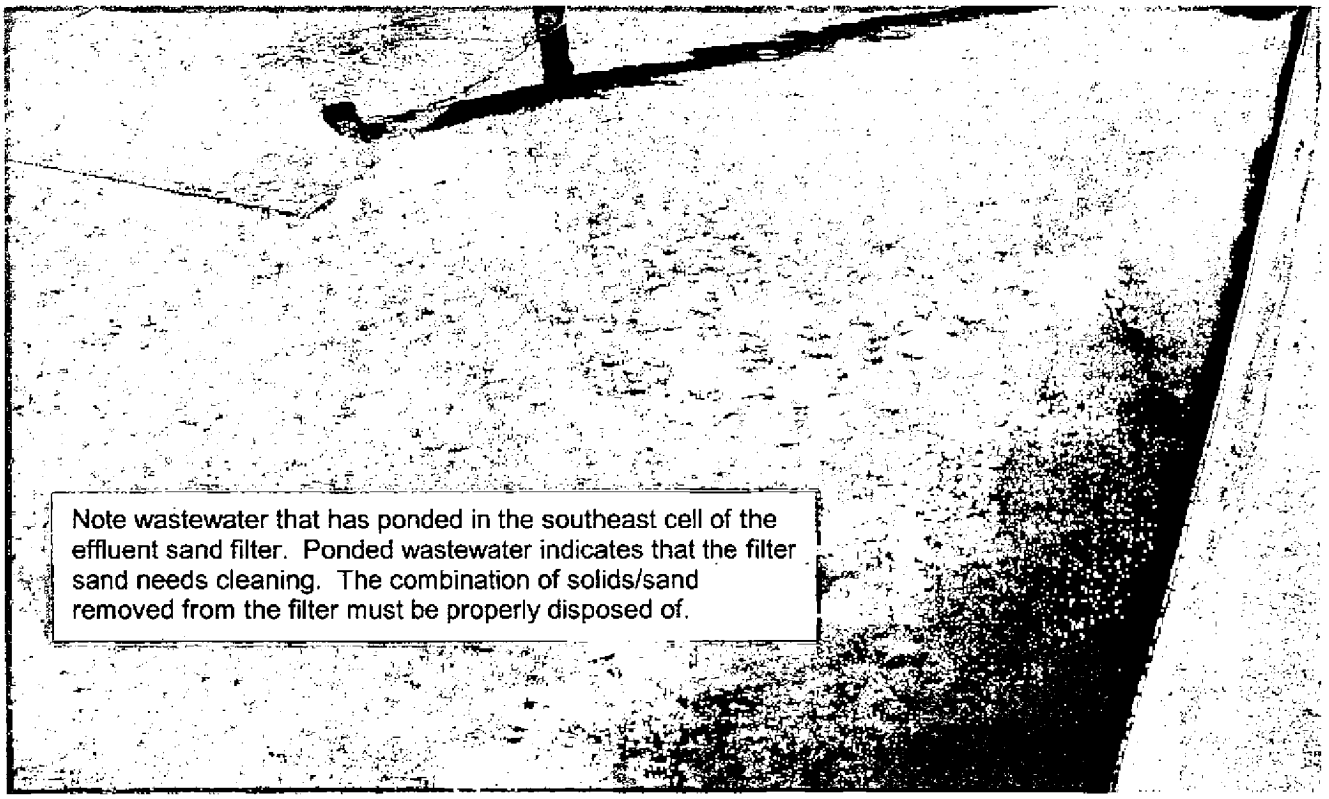

Figure 2.

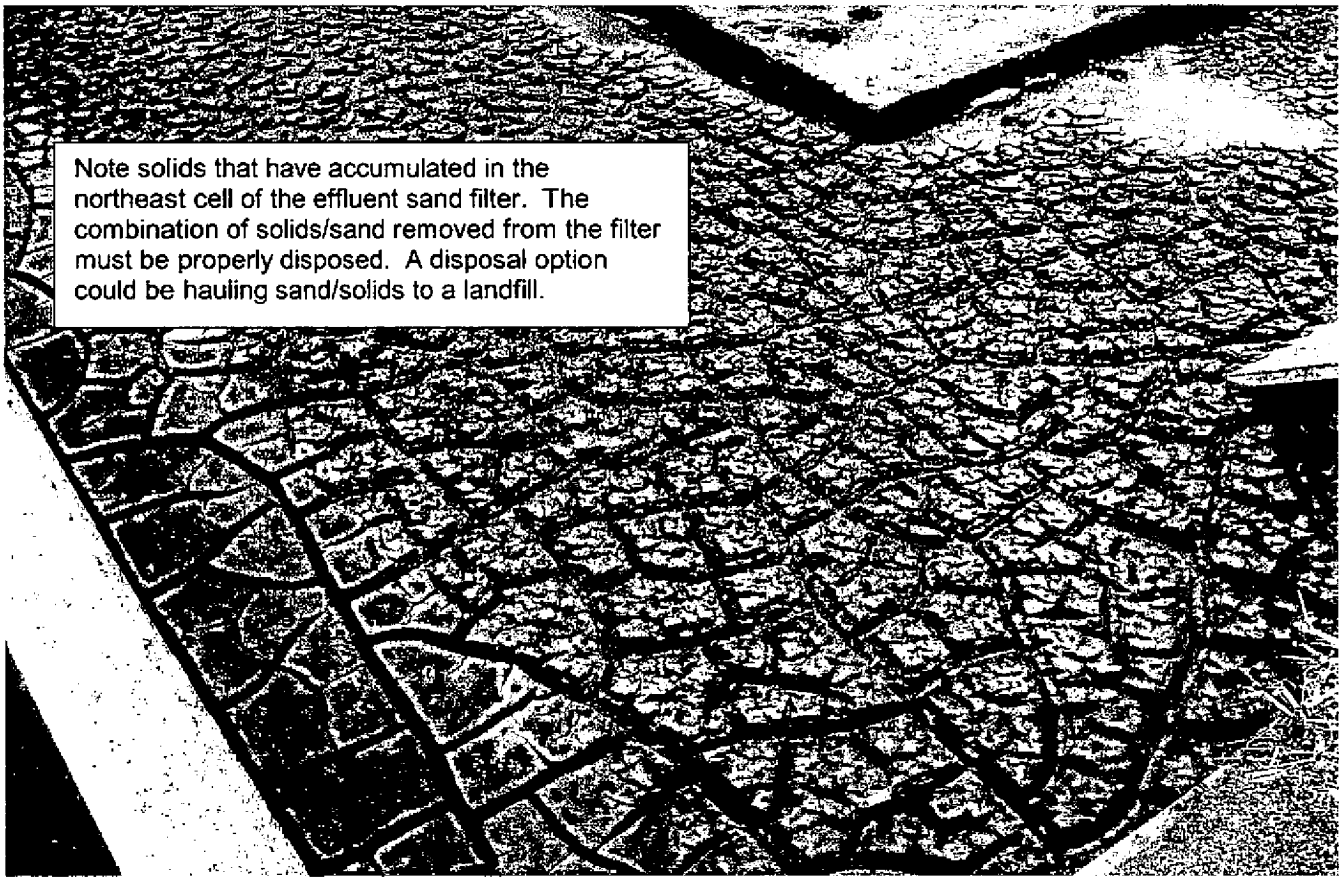

Figure 3.

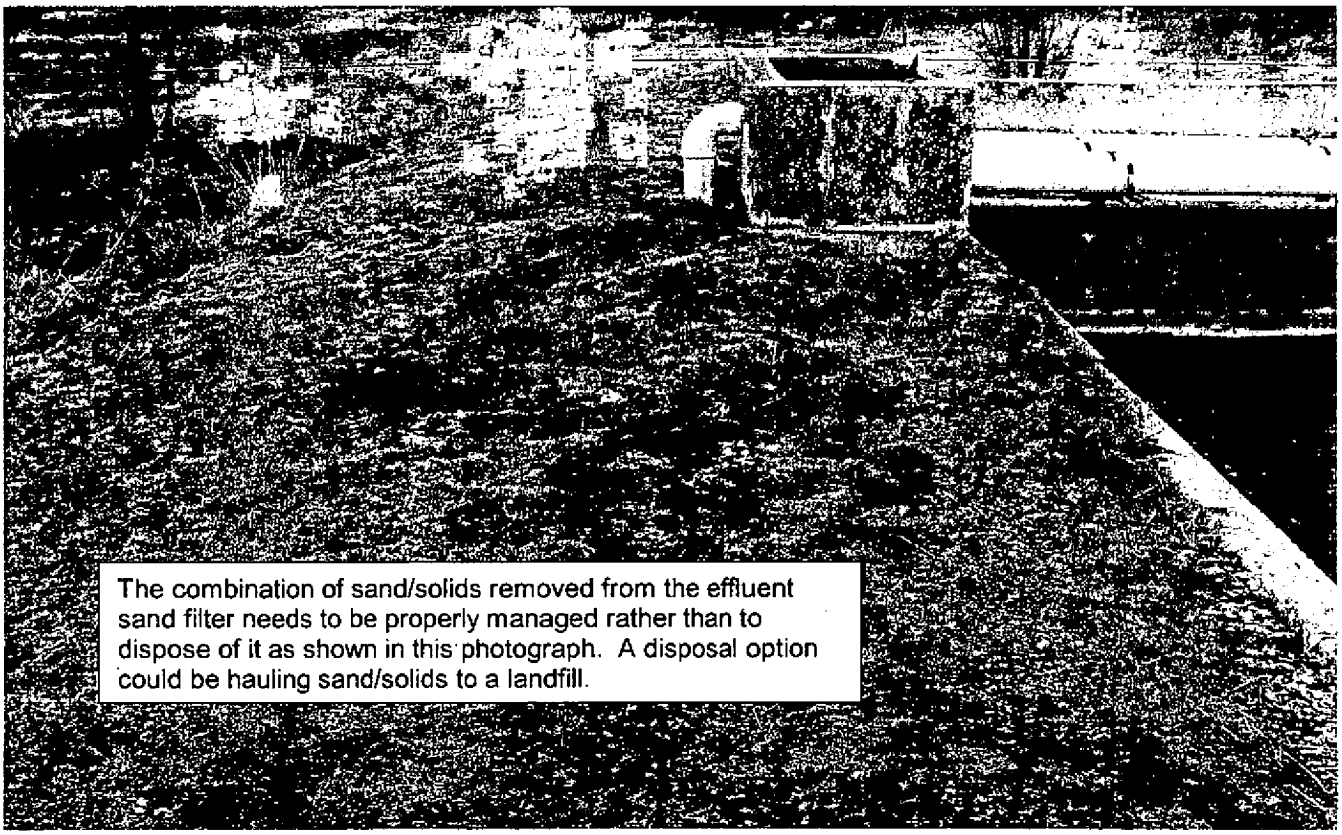

Figure 4.

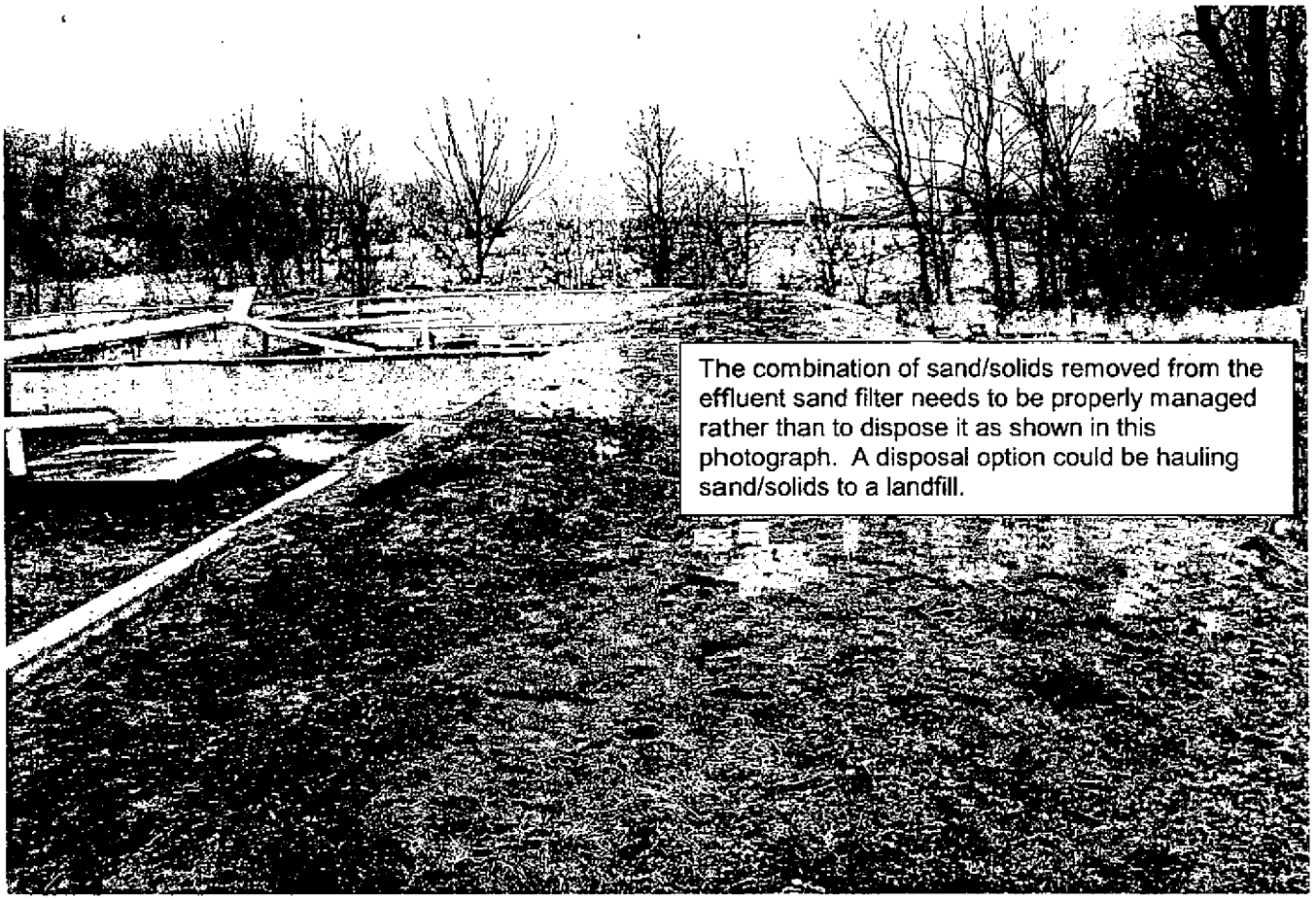

Figure 5.

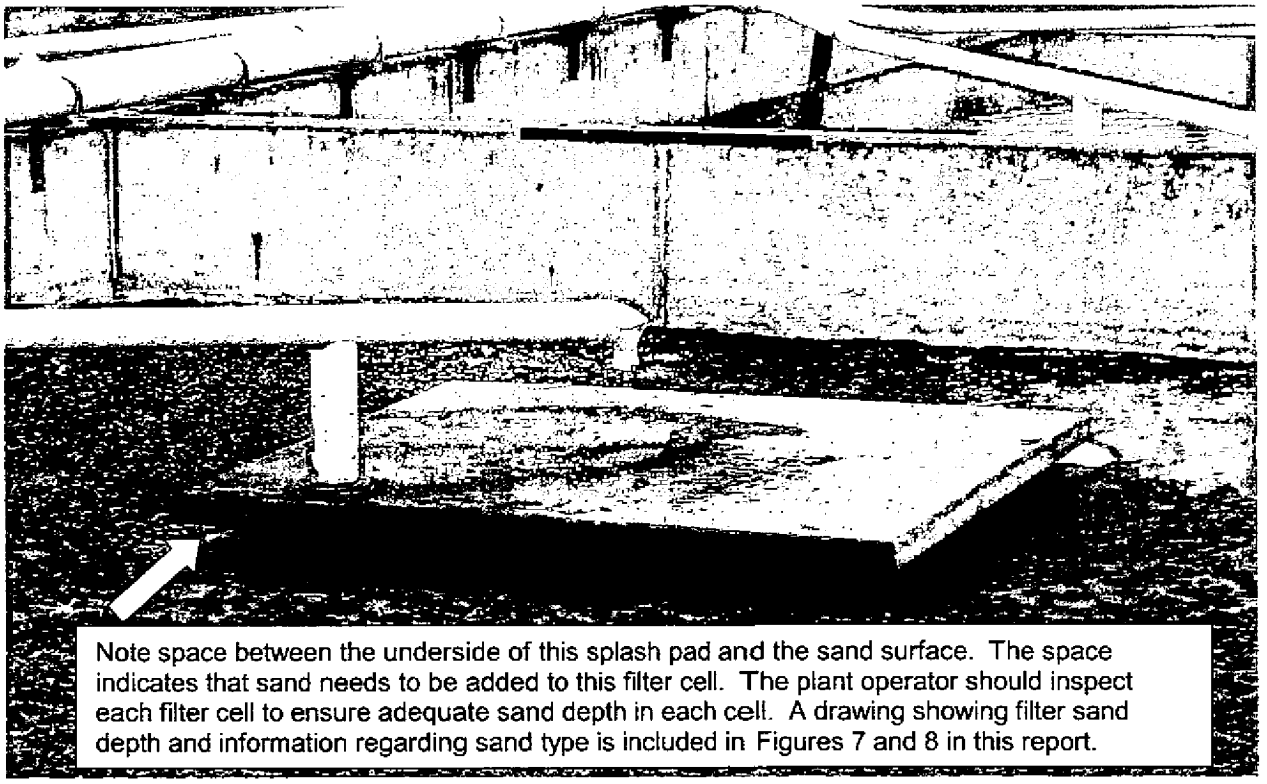

Figure 6.

Sand Filter Cross Section showing gravel/sand layers thickness

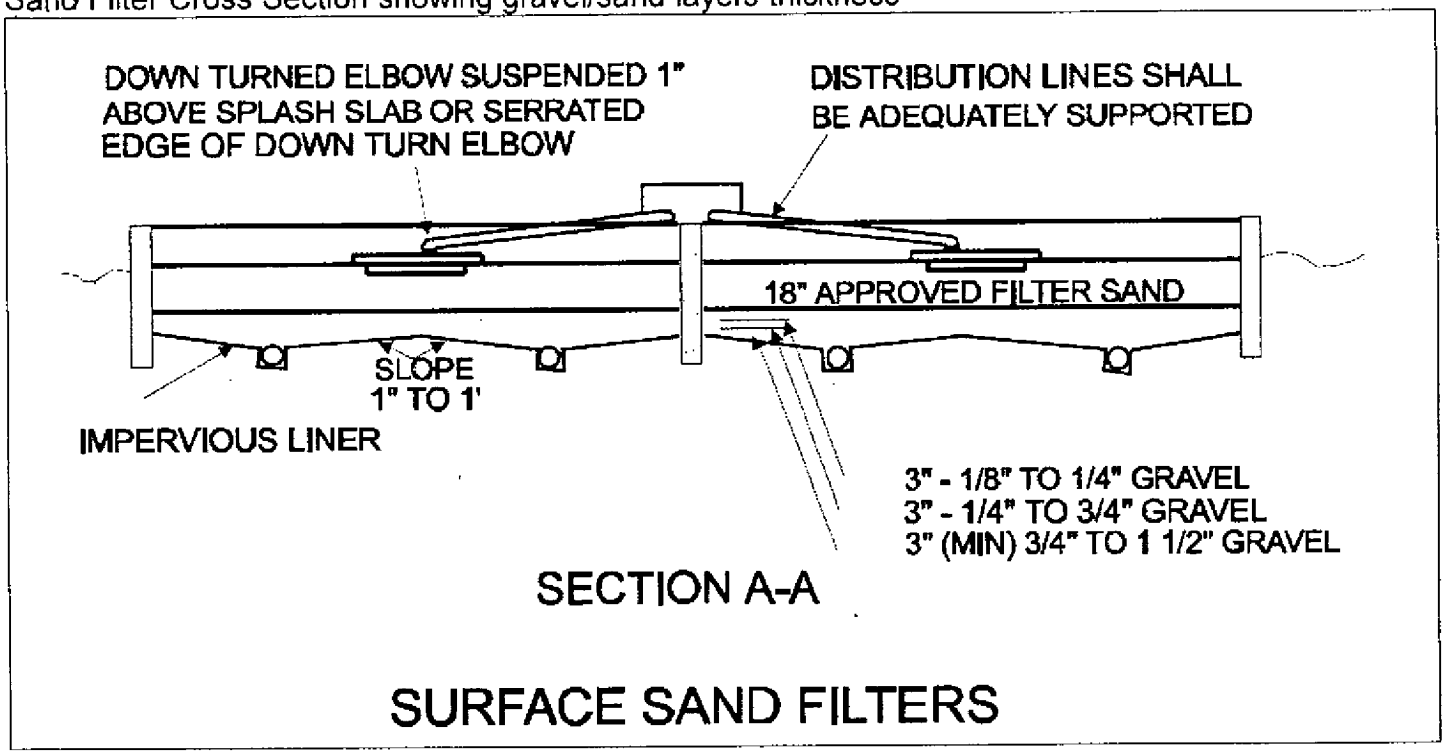

Figure 7.

Ohio Administrative Code Filter Sand Requirements

3745-42-09 **Requirements for filter sand.**

(A) Applicability.

(1) No person shall install or replace sand-filter sand without first providing the director with written certification that the standards identified in this rule are met. The certification statement shall be obtained from the sand manufacturer or any professional engineer and shall be supported by laboratory analysis.

(2) This rule shall apply to owners and operators of the following treatment works:

(a) Conventional subsurface sand filters:

(b) Conventional surface sand filters:

(c) Recirculating sand filters: and

(d) Other similar sand filter technologies.

(B) Owners and operators of facilities described in paragraph (A)(2) of this rule shall use only sand that has:

(1) Undergone a sieve analysis and met the criteria of one of the following standards:

(a) ASTM C136. "Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates;" or

(b) ASTM D451. "Standard Method for Sieve Analysis of Granular Mineral Surfacing For Asphalt Roofing Products;"

(2) An effective size and uniformity coefficient. in conformance with table B-1 of this rule:

Table B-1

Sand filter technology	Effective size (millimeters)	Uniformity coefficient
Conventional subsurface sand filters *	0.4 to 1.0	less than 3.0
Conventional surface sand filter *	0.4 to 1.0	less than 3.0
Recirculating Sand Filter *	1.2 to 2.5	less than 2.0

*Sand shall be washed and free of clay and silt to minimize the amount of fines in the sand.

(3) Been quantified using ASTM C117. "Standard Test Method for Materials Finer than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing." The percentage of the material passing the seventy-five-micrometer sieve shall not exceed 1.5 per cent of the total sample weight.

(4) Been analyzed using ASTM D4318. "Standard Test Methods for Liquid Limit. Plastic Limit. and Plasticity Index of Soils." and classified as nonplastic.

Effective: 12/1/2005

R.C. 119.032 review date: 10/17/2008

Promulgated Under: R.C. 119.03
Statutory Authority: R.C. 6111.03
Rule Amplifies: R.C. 6111.03. 6111.44
Prior Effective Dates: None

Figure 8.